United States Joint Forces Command
Joint Warfighting Center

JWFC
Simulation Center Update

Presented by:
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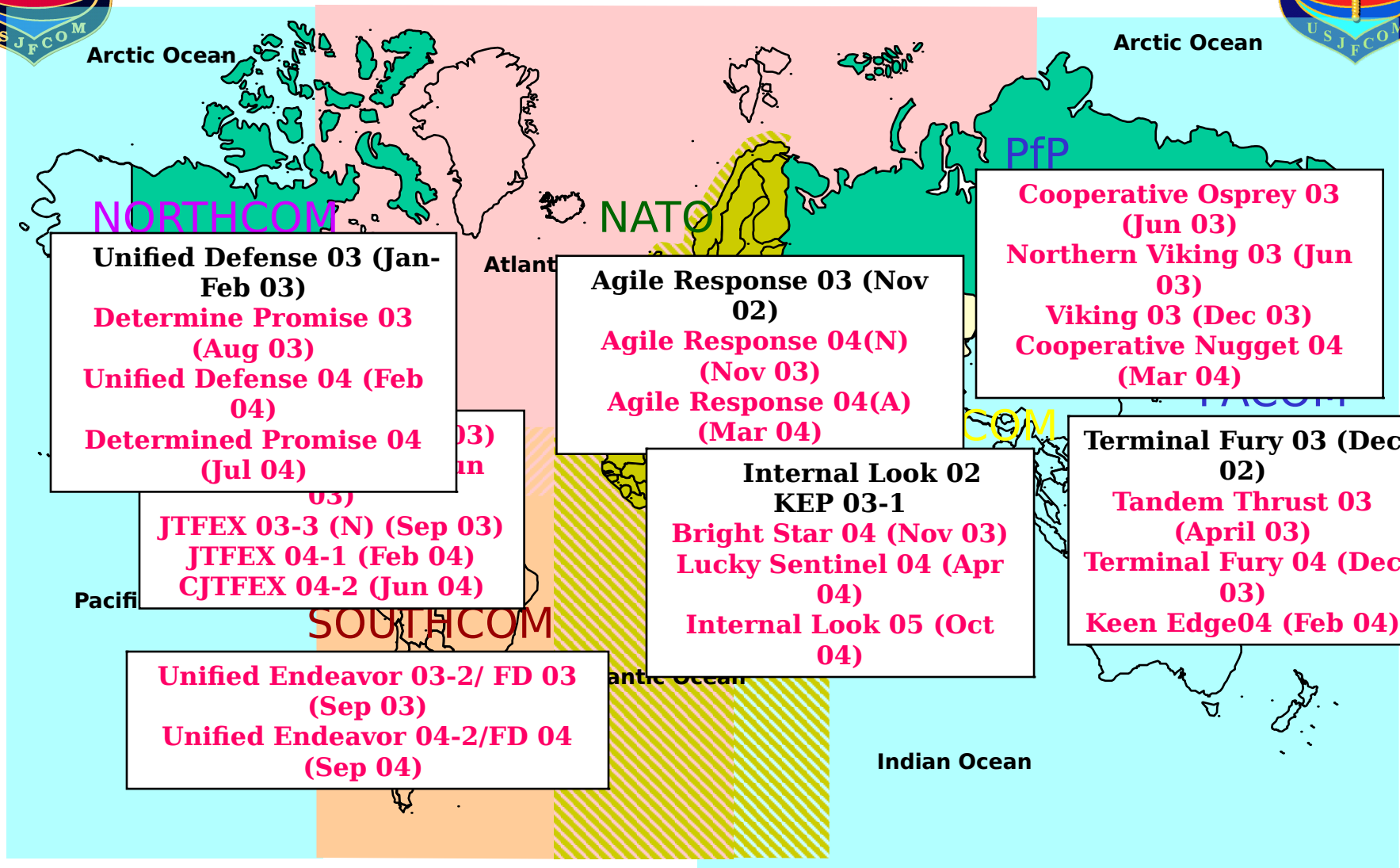
08 April 2003

JWFC Exercise Support

USJFCOM JWFC



JWFC Exercise Support

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- USJFCOM Events
  - JNTC (May 03) {AWSIM}
  - Roving Sands 03 (Jun 03)
    - Downgraded to SIMEX {AWSIM}
  - JSIMS SVE (Jun-Sep 03) {NASM}
  - Unified Endeavor 03-2 (Sep 03) {JTLS}
  - JSIMS SVVT (Nov-Dec 03) {NASM}

JWFC Exercise Support

- JWFC Events
  - Tandem Thrust 03 (Apr 03 {PACOM/JTLS}
  - Agile Leader 03 (May 03) {EUCOM/JTC}
    - Downgraded to TPFDD Exercise
  - Terminal Fury 04 (Dec 03) {PACOM/JTLS}
  - Agile Response 04 (USAREUR) (Mar 04) {EUCOM/JTLS}

JSIMS UPDATE

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- Finish Version 1.0 development & delivery by July 03; discontinue all other development efforts
  - Service ‘legacy simulation’ maintenance funding stripped out of POM
- Conduct an Analysis of Alternatives (AoA) in FY03
  - JFCOM will provide support to OSD
- JWFC conduct final Version 1.0 testing in Sep 03
  - Asked OSD for schedule relief to 1st Qtr FY04
- Establish a Software Support Facility @ JWFC
  - Working feasible transition plan with PM

JWFC INITIATIVES

- On-going Simulation Initiatives
  - JTLS-JCATS HLA Interface
  - JTLS-JQUAD Interface
  - JTLS Web-Enabled Distribution

JTLS – JCATS HLA Federation

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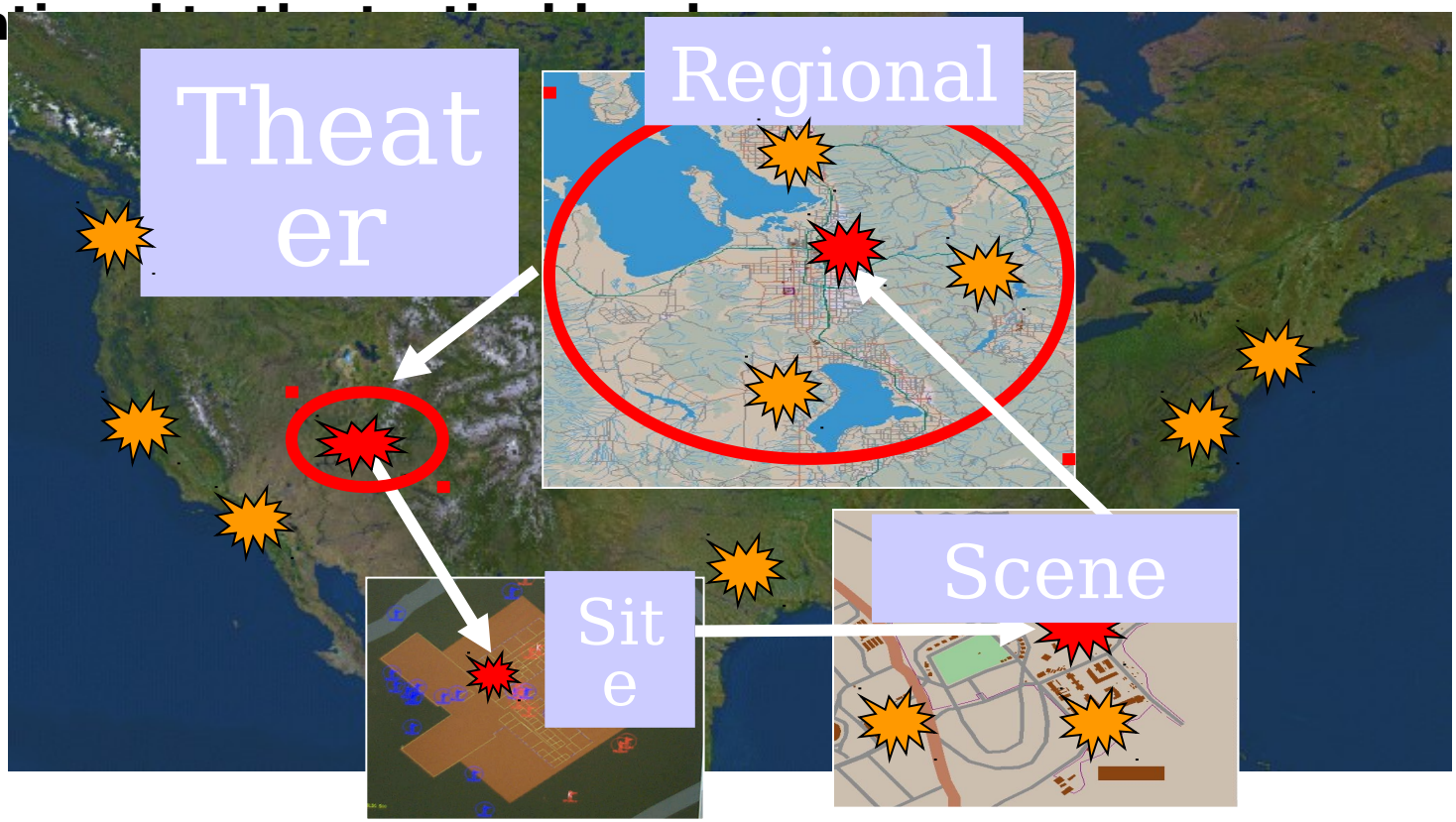
Develop a High Level Architecture (HLA) federation between Joint Theater Level Simulations (JTLS) and Joint Conflict and Tactical Simulation (JCATS) to offer the training audience the capability to conduct multi-echelon training from the opera



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JTLS - JQUAD Federation

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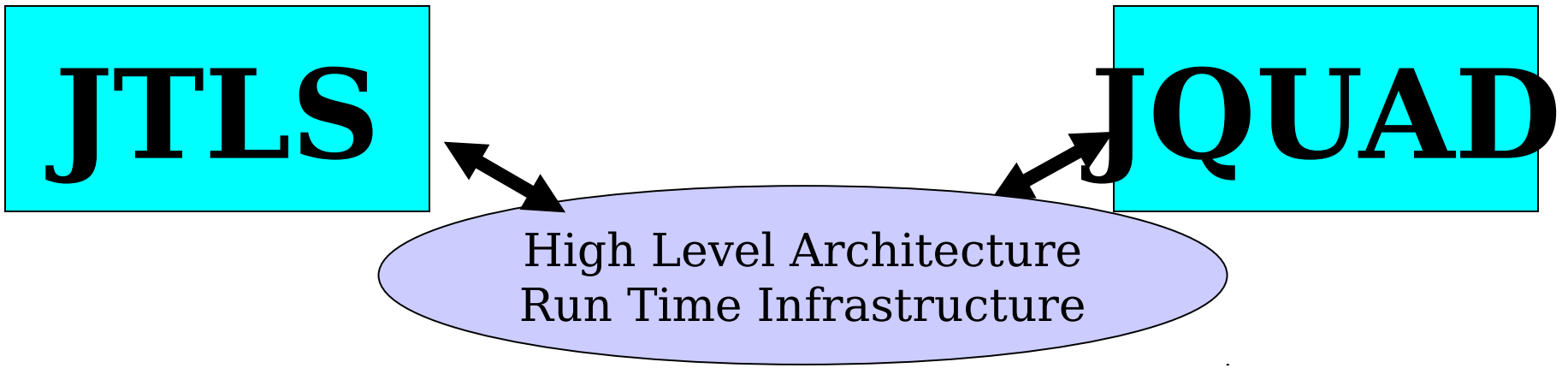

- **Attribute and adjudication shared across models**
- **JTLS provides reports and data to JQUAD**
- **JQUAD provides reports and data to JTLS**
- **Combination provides enhanced reporting via GCCS**
- **JQUAD provides reports to component C4ISR systems**
- **HLA approach allows flexibility to combine with other HLA federations (i.e. JNTC, JTLS-JCATS, etc…)**

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Web - Enabled JTLS

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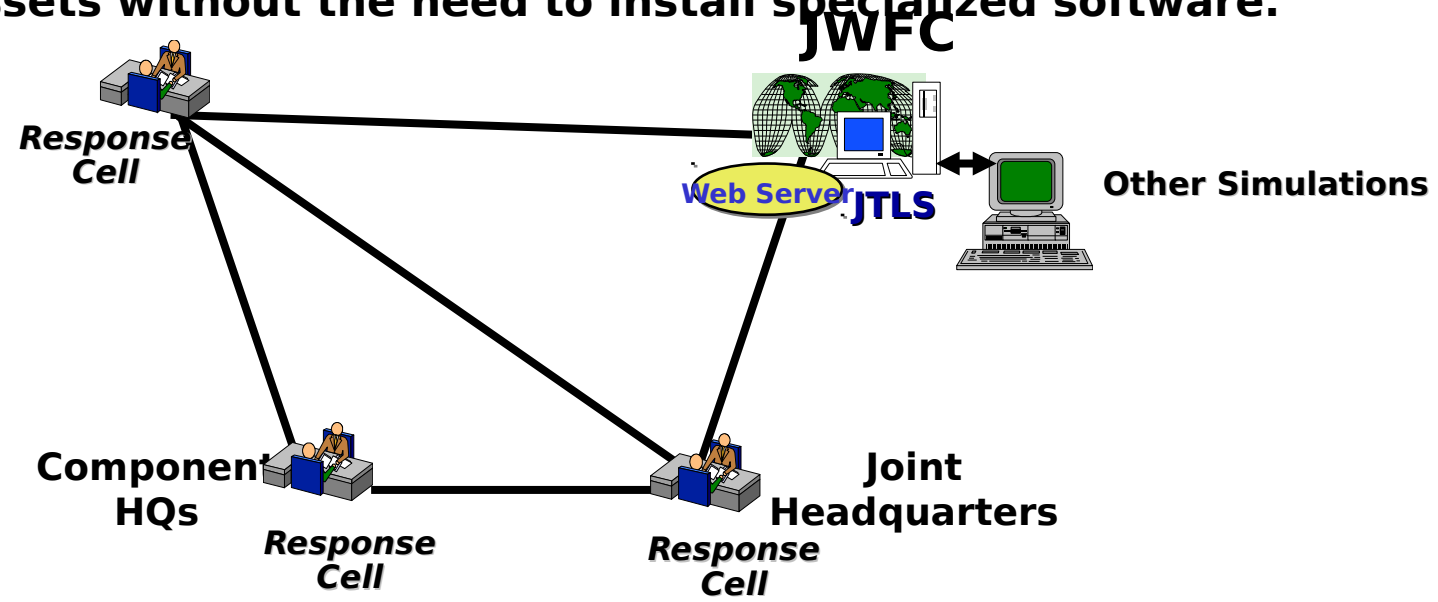
Create a web-based player interface that uses a standard web browser to present information to an instructor/controller (I/C) and serves as an interface to send orders back to JTLS. Permit the distribution of JTLS player stations to remote locations using the remote command's existing computer assets without the need to install specialized software.



- **One architecture supports multiple, simultaneous events at multiple sites**
- **Web-enabled distribution offers lowest cost in bandwidth and footprint**

JWFC INITIATIVES

- Initiatives Under Consideration
  - JTLS-TBMCS
  - JCATS Enhancements
  - JTLS-TACSIM
  - JTLS-JDLM
  - JTLS-JSAF

JTLS - TBMCS C2 Link

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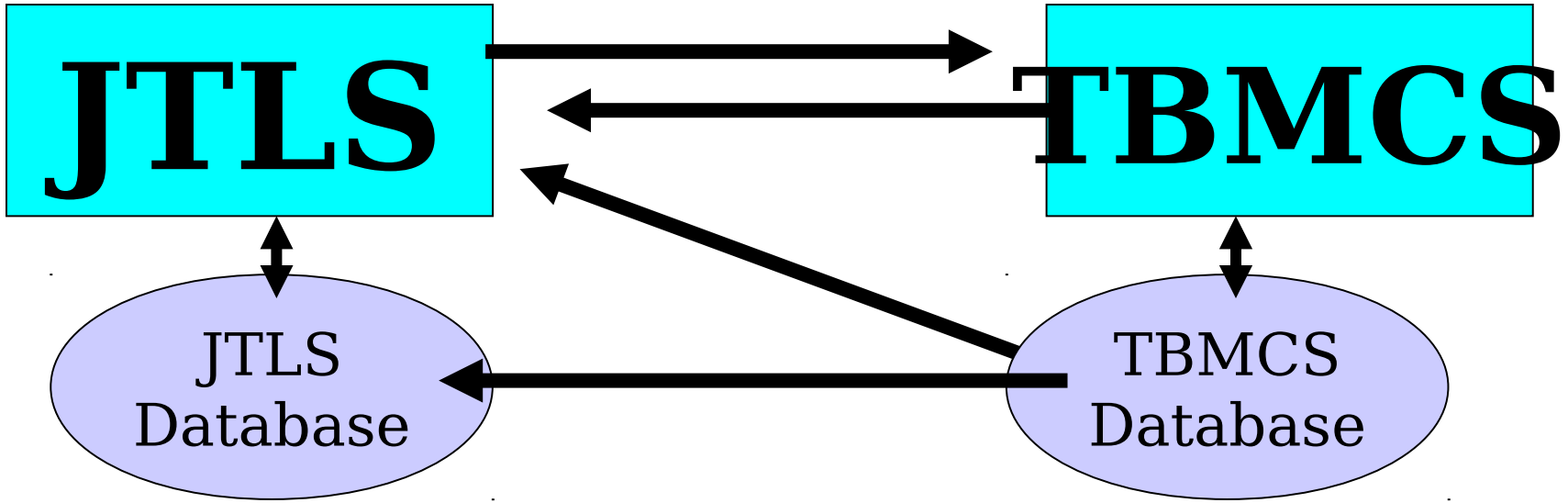

- **JTLS provides reports directly to TBMCS**
- **TBMCS provides reports and data to JTLS**
- **Both provide reports to GCCS**
- **TBMCS open access database allows flexibility and easy configuration management**

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JCATS for Live, Virtual and Constructive Simulation

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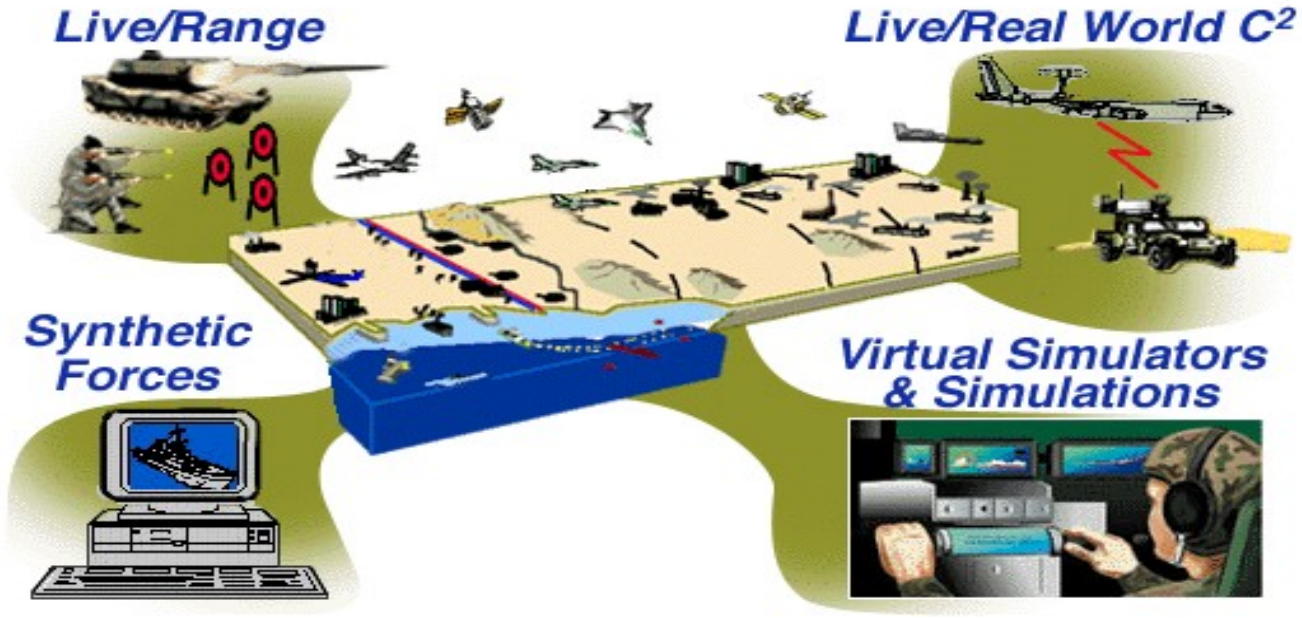
Concept

- Provide enhanced JCATS functionality and support for federations of live, virtual and constructive simulations in multiple operational and technical environments

Objectives

- Create an “off-the-shelf,” capability to federate live, virtual and constructive simulations for training and mission rehearsal
- Provide capability to integrate C4ISR command post crew simulators into JTF training and rehearsal events



JCATS Joint Fires & C4I Feed

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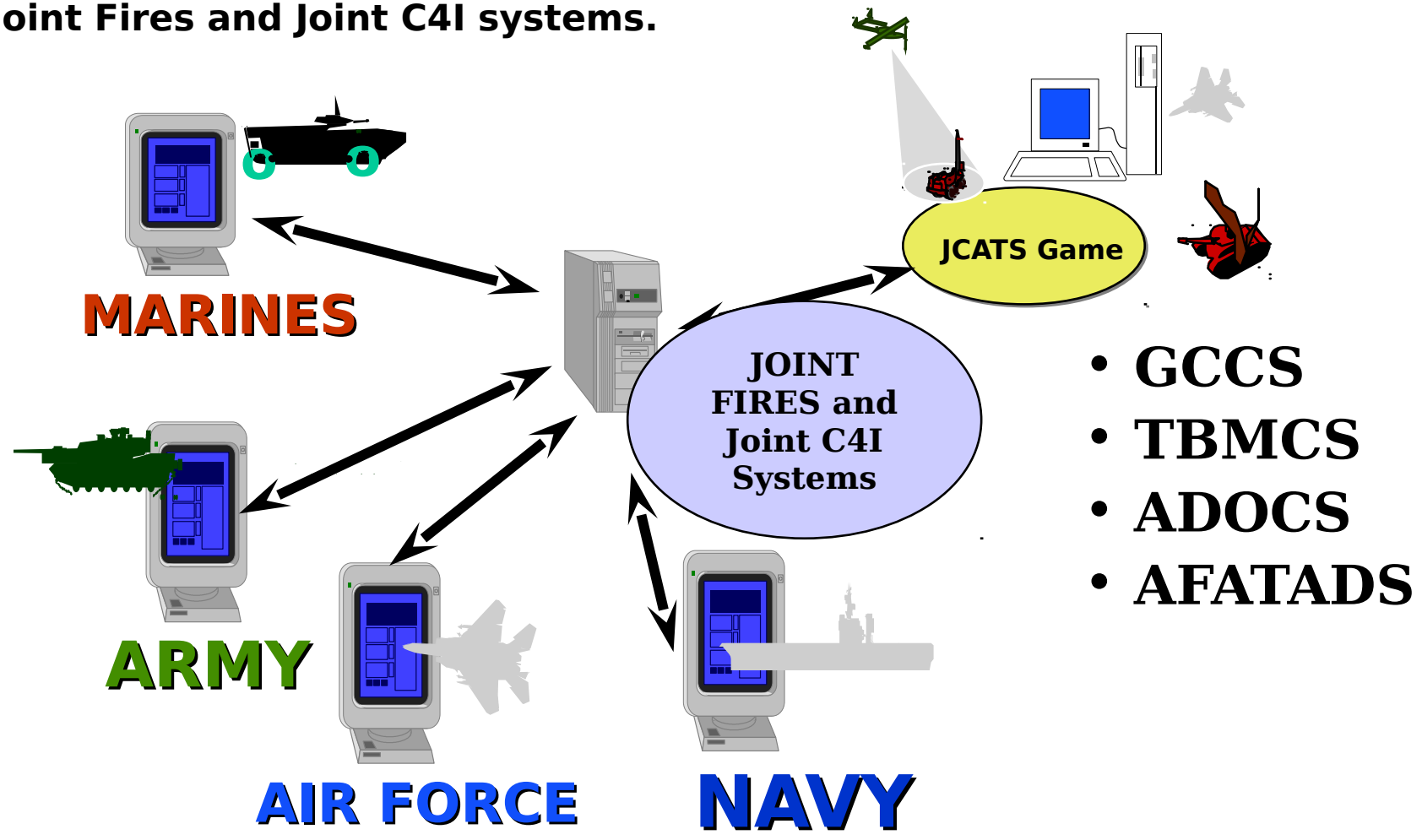
Provide select enhancements and JCATS connectivity with real-world Joint Fires and Joint C4I systems.



- GCCS
- TBMCS
- ADOCS
- AFATADS

JWFC INITIATIVES

- Initiatives Under Consideration
  - JTLS-TBMCS
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  - JTLS-JDLM
  - JTLS-JSAF

Joint National Training Capability

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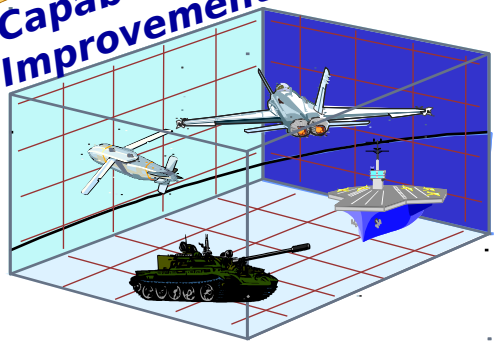
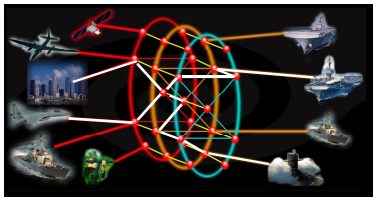
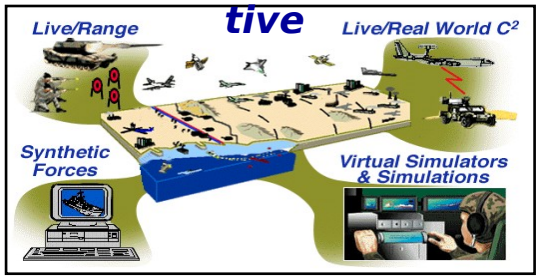
Capabilities Improvement



Experimentation and Testing

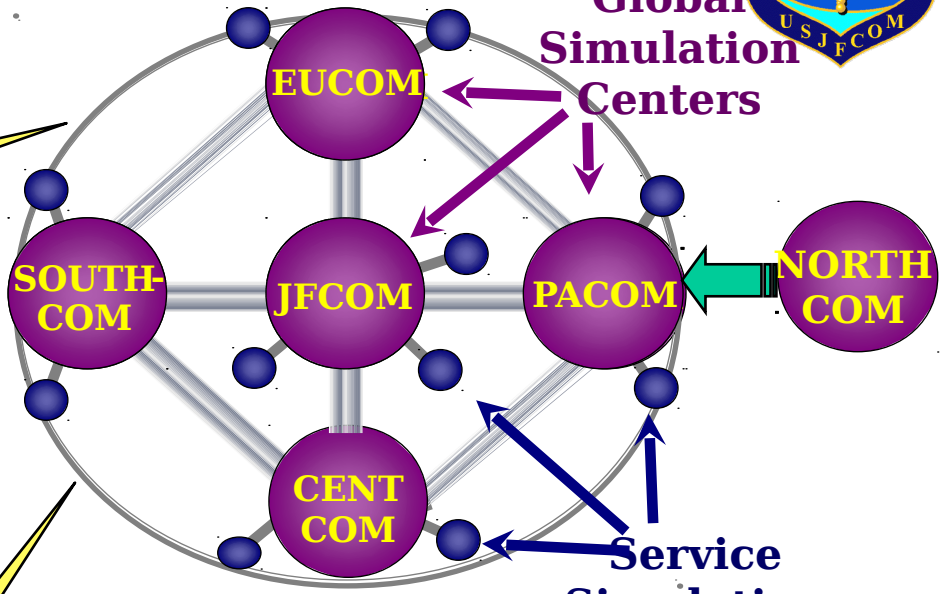


Live/Virtual/Constructive



Training Environment

Global Simulation Centers



Service Simulation, Training and Testing Centers

JNTC Concept

A global network of live, virtual and constructive components that provides a seamless training environment that supports a broad spectrum of joint and Service training

Joint National Training Capability M&S

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- **JNTC includes an integrated network of live ranges, models, simulations and simulators from each of the services to form new M&S architectures that support training transformation efforts.**

- **JNTC is establishing technical standards to enable service legacy models, joint training models, and newly emerging model technology to federate into a common architecture**

- **Goal is to provide a persistent and distributed M&S training architecture in a live, virtual, and constructive environment to support joint training at the lowest tactical level**

JNTC Thrust 1 Event Architecture for Tactical Training Exercise

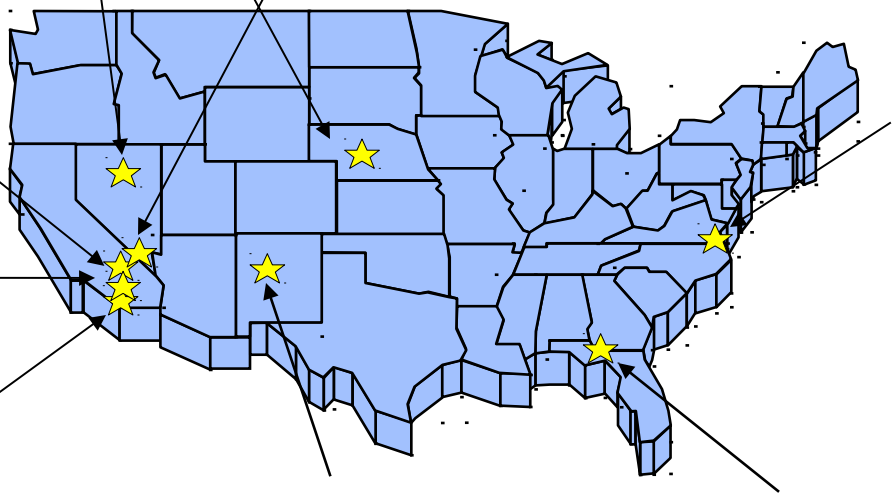
NTC FT IRWIN
ARFOR TBA
ARFOR RC
SOF RC JECG
FORWARD:
VTC-GIAC-VOIP
JSAF OPFOR
Operators
M&S TECH CONT
DBST JCATS
SIMPLE ITM
EADSIM
NETWORK MONITORING
AWSIM SERVERS
GCCS-A ABCS
TBMCS Suite @ ASOC
TBMCS-R V-UAV (4)
JSWS / CGS

OFFUT AFB
Rivet Joint Sim

NAS FALLON
EP-3 MAST Sim

NELLIS AFB
JFACC
JECG: VTC-GIAC-VOIP
AIR WARRIOR / ATI
TBMCS Servers
ADSI
JSWS TADIL J
BCD - GCCS-A
TBMCS-R

JTASC
JTF JSOTF
JECG MAIN:VTC-GIAC-VOIP
JOINT COMMS LEAD – SIM/C4 Div
OPFOR Main
GCCS TBMCS-R
ADSI C2PC



MCAGCC 29 PALMS
MEB/MARFOR
JECG RC: VTC-GIAC-VOIP
MARFOR RC
JCATS JSAF
DVTE IOS
IOW (C2PC)
AFATDS TBMCS-R

NAVFOR FCTCPAC SAN DIEGO
SLAMEX
GCCS-M

TACCSF – KIRTLAND AFB
VIRTUAL AWACS, JSTARS,
COBRA BALL JSAF
F-15 Virtual Simulators
Virtual Flag 03-2 Sims
CRC VOIP
ADSI VTC
TBMCS-R

AFC2TIG – HURLBURT FLD
AFFOR RC AWSIM / ATI
VOIP VTC
CONSTRUCTIVE AWACS
JSAF
OPFOR Operators
TBMCS-R ADSI

LEGEND:
FOCUS AREAS
M&S & INSTRUMENTATION
C4I SYSTEMS
JECG / JOINT SUPPORT

JNTC MAY FEDERATION ARCHITECTURE

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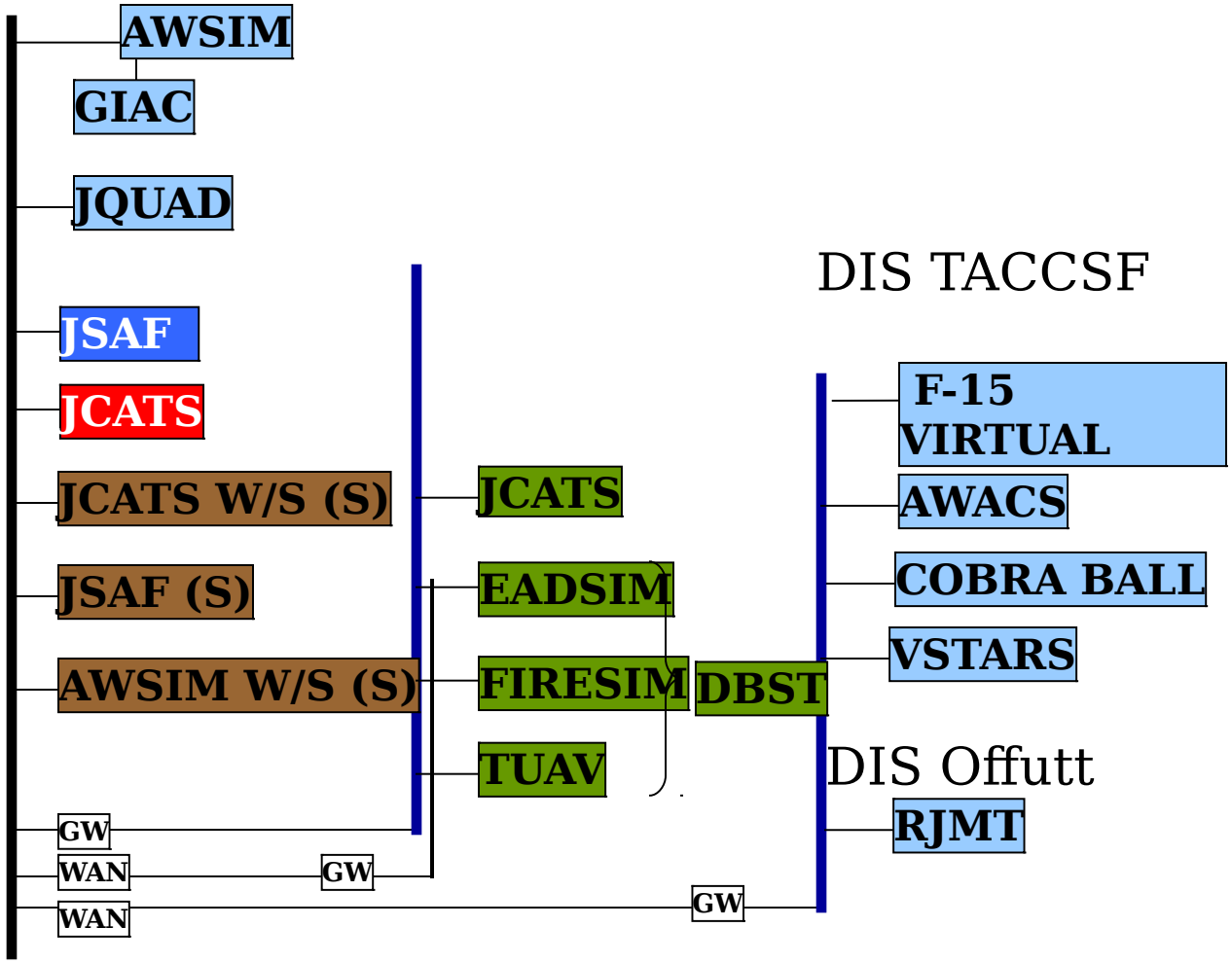

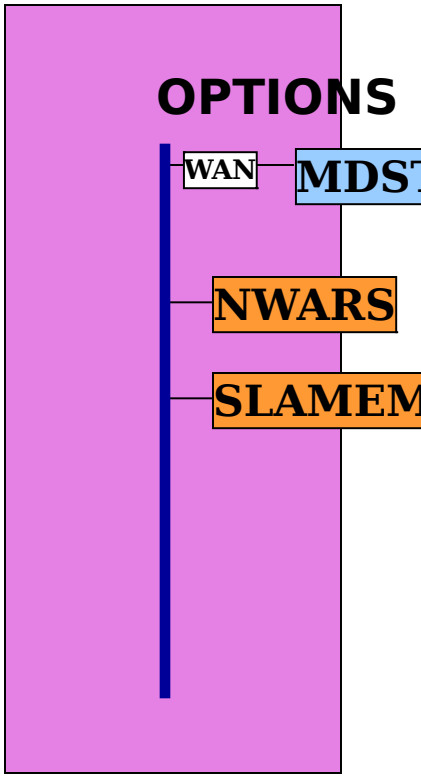

JTLS HLA Architecture

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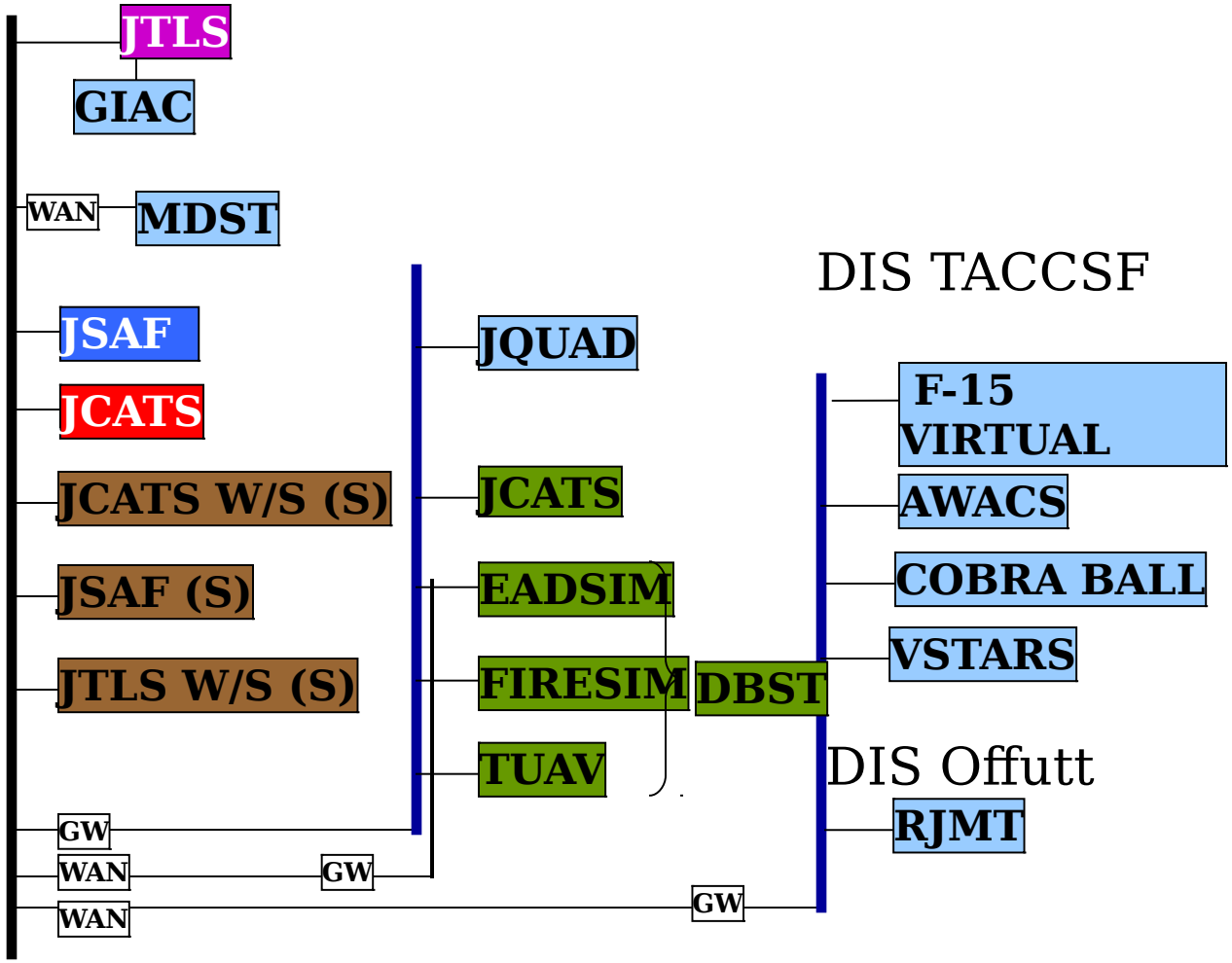
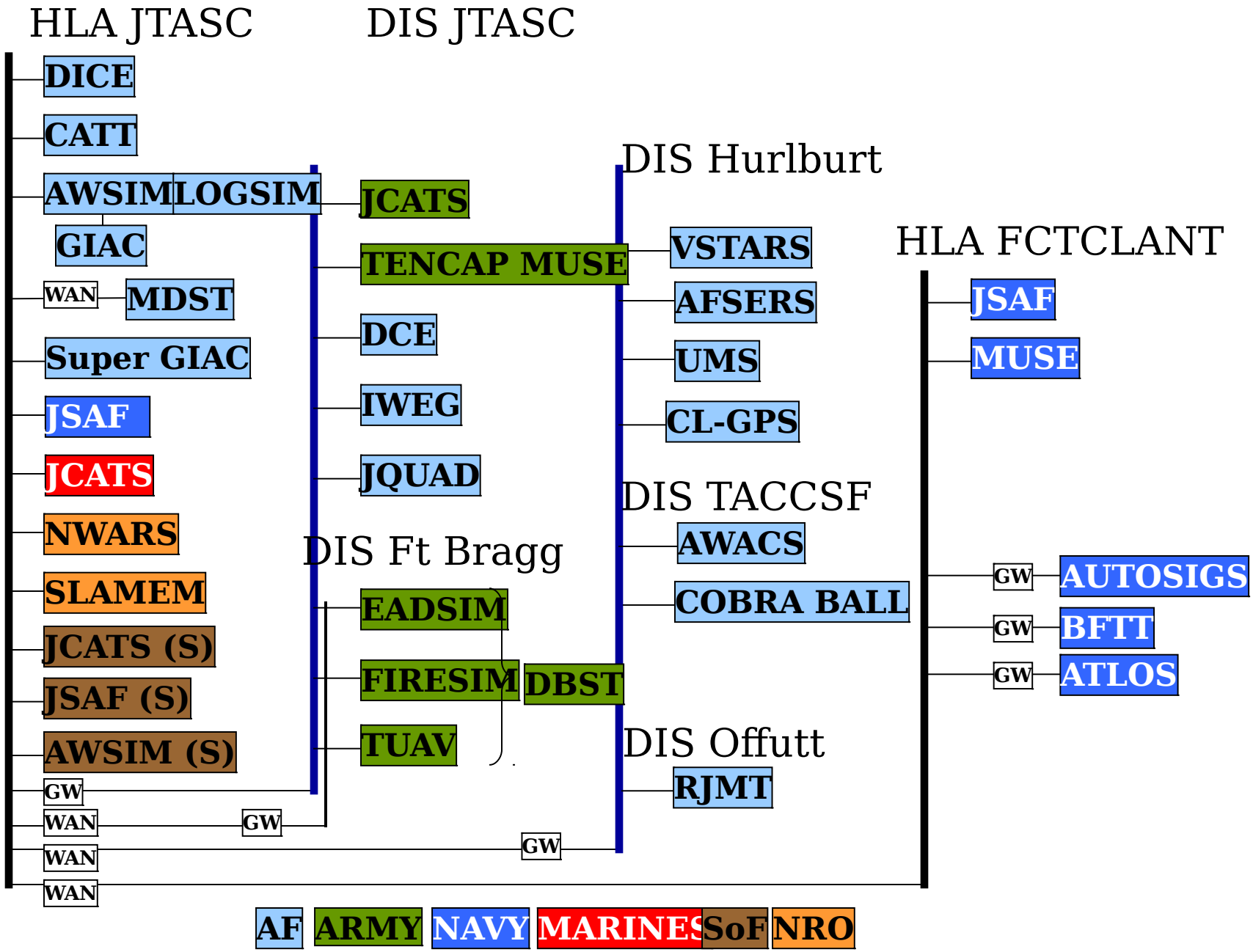
HLA & DIS JTASC



MC02 "Like" Architecture



SUMMARY

- Event schedule in a state of flux due to real world contingencies
- Supporting multiple initiatives in Modeling and Simulation
- JSIMS testing ramping up
- JNTC adding joint context to all levels of training

QUESTIONS?